January 16, 1956

Dr. Alexander Hollaender
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Dear Dr. Hollaender:

Dr. S. G. BRADLEY has asked me to refer to his application for an associateship at the Laboratory. I am happy to do so.

Bradley, as you may know, did his doctoral thesis with Sussmann at Northwestern on nutritional and morphogenesis in Dictyostelium. He did a very creditable job in recognizing and defining the protein growth factor requirement. He felt, however, that he had not had sufficient training in genetic analysis, and so came here on a postdoctoral fellowship for two years. He has been working on recombination and heterokaryosis in Streptomyces. In the course of this work, heterokaryosis has been demonstrated and confirmed by single-hyphal isolations with micromanipulatory methods; however, with our strains, no clear cut occurrence of recombination has been seen. In the course of these studies, a report has appeared from Sermonti on recombination in another species, S. coelicolor. There are a host of problems that should now be considered, including the compatibility relationships, and the possibility of phage mediated transduction; in particular, Streptomyces should afford interesting material for extending the concepts of heterokaryosis, and Bradley's work and interests should fit in very closely with that of Atwood and Pittenger's. Under separate cover, we will send you a copy of a paper in press in the Jour. Bacteriology. Would you be kind enough to pass it on to Kim for his interest when you have finished with it? The so-called "anomalous heterokaryons" mentioned briefly in the paper should be of considerable interest to Atwood and Pittenger.

Bradley is not [illegible] on, or seems to be in his personal relationships. He is tidy and industrious in the lab. But at his own pace he gets all his work done, and in retrospect, this is rather more commendable than the furious but inconstant way in which others in this lab. have worked. He sticks doggedly to his problems, and his ideas keep coming over a period of time rather than all at once. I am fairly sure that as he gets older and more confident of himself, he will show increasing initiative. In this respect (not emotionally or intellectually) he is still young even for his tender years. He is the most amiable person here, always cheerful and willing to help. Surprisingly, he is rather critical and conservative— one thing he has learned here, however, is the need to take a plunge and try experiments that a priori ought not to work, for sometimes they do. I should say that his productivity is more predictable than most students'— he is bound to come up with something, and you will believe it when he does. Please let me know if I can add any particulars.

With best regards

Josh